

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 19 February 2004 (19.02,2004)

PCT

(10) International Publication Number WO 2004/015880 A1

(51) International Patent Classification⁷:

H04B 1/28

(21) International Application Number:

PCT/JP2003/010162

(22) International Filing Date: 8 August 2003 (08.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2002-233512 2002-245460 9 August 2002 (09.08.2002) JP 26 August 2002 (26.08.2002) JP

(71) Applicant (for all designated States except US): CA-SIO COMPUTER CO., LTD. [JP/JP]; 6-2, Hon-machi 1-chome, Shibuya-ku, Tokyo 151-8543 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SOMEYA, Kaoru [JP/JP]; 6-27, Umezono 3-chome, Kiyose-shi, Tokyo 204-0024 (JP).

(74) Agent: KIMURA, Mitsuru; 2nd Floor, Kyohan Building, 7, Kandanishiki-cho 2-chome, Chiyoda-ku, Tokyo 101-0054 (JP).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

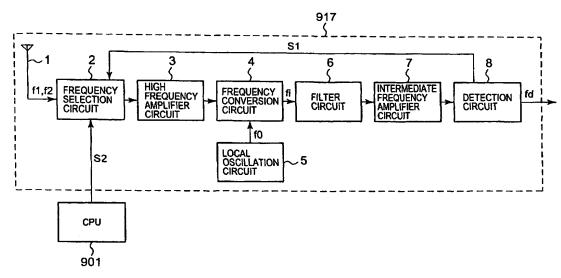
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RADIO WAVE RECEPTION DEVICE AND RADIO WAVE CLOCK



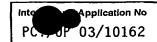
(57) Abstract: In a radio wave reception device and a radio wave clock capable of receiving multiple frequencies, an intermediate frequency signal whose frequency is fixed can be output while a signal output from a local oscillation circuit (5) is fixed.





INTERNATIONAL SEARCH REPORT





A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04B1/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 HO4B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT		
Calegory °	Citation of document, with indication, where appropriate, of	the relevant passages	Relevant to claim No.
Х	US 6 005 506 A (BAZARJANI SEYI AL) 21 December 1999 (1999-12-		1,6,12
Y	column 2, line 2 - line 5		2-5,7,8,
	figure 1		11,13
		>	
Y	US 6 389 059 B1 (DIXON ROBERT 14 May 2002 (2002-05-14) column 15, line 45 - line 57	C ET AL)	2,3,7,
Y	US 6 370 365 B1 (CALLAWAY JR ET AL) 9 April 2002 (2002-04 figure 3	EDGAR HERBERT -09)	8
		-/	
X Fu	ther documents are listed in the continuation of box C.	X Patent family members are	listed in annex.
° Special o	categories of cited documents :	"T" later document published after the	e international filing date
"A" docum	nent defining the general state of the art which is not idered to be of particular relevance	or priority date and not in conflic cited to understand the principle invention	or theory underlying the
filing	r document but published on or after the international date	"X" document of particular relevance cannot be considered novel or of	annot be considered to
whic	nent which may throw doubts on priority claim(s) or h is cited to establish the publication date of another ion or other special reason (as specified)	involve an inventive step when t "Y" document of particular relevance	the claimed invention
*O' docur	ment referring to an oral disclosure, use, exhibition or r means	cannot be considered to involve document is combined with one ments, such combination being	or more other such docu-
P docum	nent published prior to the international filing date but than the priority date claimed	in the art. "&" document member of the same p	•
Date of the	e actual completion of the international search	Date of mailing of the internation	al search report
	14 January 2004	21/01/2004	
Name and	d mailing address of the ISA	Authorized officer	
	European Patent Office, P.B. 5818 Patentlaan 2		

INTERNATIONAL SEARCH REPORT

PC 17 JP 03/10162

C (C==11==	-N COMMENTS CONSIDERED TO BE DELEVANT	FC1/0F 03/10102		
		Polovant to oloim No		
Calegory	Citation of document, with indication, where appropriate, of the relevant passages	relevant to claim No.		
C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages WO 02 27953 A (OLSSON HAAKAN ;SPIREA AB (SE); LI XIAOPENG (US)) 4 April 2002 (2002-04-04) figure 5	Relevant to claim No. 4,5		

NATIONAL SEARCH REPORT

ation on patent family members

Internation No PCT/JP 03/10162

, - , - , - , , ,	 _				
Patent document ited in search report		Publication date		Patent family member(s)	Publication date
JS 6005506	Α	21-12-1999	AU	746148 B2	18-04-2002
	••		AU	1717899 A	28-06-1999
			BR	9813414 A	10-10-2000
			CA	2313139 A1	17-06-1999
			CN	1281597 T	24-01-2001
			EP	1040587 A1	04-10-2000
			JP	2001526487 T	18-12-2001
			WO	9930428 A1	17-06-1999
			ZA	9811125 A	10-10-2000
				9011125 A	
JS 6389059	B1	14-05-2002	US	5887020 A	23-03-1999
			US	5291516 A	01-03-1994
			CA	2197332 A1	29-02-1996
			EP	0776557 A1	04-06-1997
			ΙL	114924 A	17-02-2000
			JP	10504698 T	06-05-1998
			WO	9606490 A1	29-02-1996
			US	5694414 A	02-12-1997
			US	5790587 A	04-08-1998
			US	5796772 A	18-08-1998
			US	5815525 A	29-09-1998
			US	60885 90 A	11-07-2000
			US	2003206530 A1	06-11-2003
			US	5671219 A	23-09-1997
		•	US	5818820 A	06-10-1998
			US	5648955 A	15-07-1997
			US	5768264 A	16-06-1998
			US	6229792 B1	08-05-200
			US	6434137 B1	13-08-2002
			US	6021333 A	01-02-2000
			US	6094575 A	25-07-2000
			US	6532365 B1	11-03-2003
			US	6005856 A	21-12-1999
			US	6161013 A	12-12-200
			ÜS	6112080 A	29-08-200
			ÜS	5787076 A	28-07-199
			AU	5668994 A	08-06-199
			WO	9411978 A1	26-05-199
			AT	233971 T	15-03-200
			ΑÙ	2140092 A	30-12-199
			CA	2102914 A1	14-11-199
			DE	69232943 D1	10-04-200
			DE	69232943 T2	28-08-200
			EP	0584248 A1	02-03-199
			JP	2846118 B2	13-01-199
			JP	6507768 T	01-09-199
			WO	9221195 A1	26-11-199
US 6370365	B1	 09-04-2002	NONE		
				ک نت بیم بادا سه سه سه سه هم ۱۰۰ نده بین هی بین _م یه کی	08-04-200
WO 0227953	Α	04-04-2002	AU SE	9249001 A 0003520 A	30-03-200
			or.	UUUSDZU K	30-03-200
			WO	0227953 A1	04-04-200